


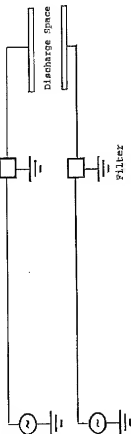


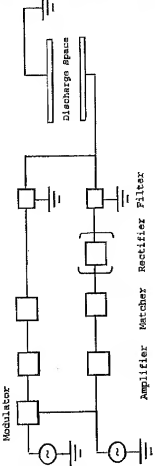
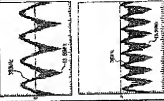
Correspondence Table 1-1

|               | The present Application   | Priority Document<br>JP2003-197799  |
|---------------|---|---|
| Claims<br>1-3 | an atmospheric pressure plasma processing apparatus at atmospheric pressure or at approximately   | [0001], [0022]  |
|               | (i) high frequency electric field A is formed by superposing a first high frequency electric field and a second high frequency electric field             | Claim 7, [0007], [0027], [0035] - [0041]  |
|               | (i) a first high frequency electric field of 200 kHz or less and a second high frequency electric field of 800 kHz or more                                | [0039] - [0040]   |
|               | (ii) transferring energy of the excited discharge gas to a film forming gas, whereby the film forming gas is excited;                                     | [0023]  |
|               | the first process comprising the steps of:  | Claim 1<br>[0014] - [0015]<br>Example 1 [0056] - [0058]   |
|               | (iii) exposing a substrate to the excited film forming gas, whereby a film is formed on the substrate,  |   |
|               | the second process comprising the steps of:   |   |
|               | (v) exposing the film formed in the first process to the excited gas containing the oxidizing gas,  |   |
|               | moving the substrate between the first discharge space and the second discharge space   | Claim 2, [0032], FIG.1, FIG.2   |
|               | the discharge gas contains nitrogen of which content is 50 % by volume or more based on a volume of the discharge gas                                     | Example 1 [0057],<br>Example 2 [0072]<br>film forming gas:<br>11 (=10+1) L/minute<br>(21.1%)<br>discharge gas: nitrogen<br>40 L/minute<br>(76.9%) |
|               | a discharge space of the first process is formed between a first electrode and a second electrode which are facing each other;                            | [0007], [0031],<br>FIG. 1, FIG. 2, FIG. 3   |
|               | the first high frequency electric field is applied by the first electrode and the second high frequency electric field is applied by the second electrode | [0037], FIG. 2  |
| Claim 4       | the discharge gas contains a reducing gas   | Example 1 [0057],<br>Example 2 [0072]<br>reducing gas: hydrogen<br>1 L/minute ( 1.9%)   |
| Claim 5       | the reducing gas is hydrogen  | Example 1 [0057],<br>Example 2 [0072]   |

Correspondence Table 1-2

|          | The present Application   | Priority Document<br>JP2003-197799                 |
|----------|---|--|
| Claim 12 | the film is a metal oxide film  | Example 1 [0057],<br>Example 2 [0072]              |
| Claim 13 | the film is a transparent conductive film   | Example 1, [0069],<br>Table 2,<br>Example 2 [0072] |
| Claim 14 | the film forming gas contains an organo-metallic compound having a metal atom selected from the group consisting of indium(In), tin(Sn), zinc(Zn), zirconium(Zr), antimony(Sb), aluminum(Al), gallium(Ga) and germanium(Ge) | Example 1 [0057],<br>Example 2 [0072]<br>In, Sn    |
| Claim 15 | the first process and the second process are alternately repeated a plurality of times  | Claim 2,<br>Example 1 [0058]                       |
| Claim 16 | a thickness of the accumulated film in the first process per batch is not more than 10 nm   | Claim 4, [0018],<br>Example 1<br>[0058] - [0063]   |
| Figures  | FIG. 1  | FIG. 1 + FIG. 2                                    |
|          | FIG. 2(a), FIG. 2(b)  | FIG. 3(a), FIG. 3(b)                               |

Comparison between the Present Application and Sumasa Reference

| Pressure  | Gas  | Applied Wave Form   | Power Supply Mechanism  | Electric Field in Discharge Space  |
|---|--|---|---|--|
| Present Application<br>At or near atmospheric pressure<br>(20 - 110 kPa)<br>Ii 10/544,084 | Discharge Gas:<br>Nitrogen > 50 volume %                   |  |  |  |
| Reference<br>Sumasa 6,085,181   | Reduced pressure atmosphere<br>(ex. 20 mTorr)<br>Gas: CAPB |  |  |  |